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A continuation of a 3-year elementary school study investigated the effectiveness of the various schedules of a simulated environments technique on emotionally handicapped junior high school adolescents. The 58 subjects, whose original evaluation had shown no evidence of neurophysiological dysfunction or subnormal intelligence, were randomly assigned to four schedules in regular classrooms for experimental and conventional treatment. The simulated environments technique consisted of teaching strategies and procedures which revolved around role playing and was implemented in the unit framework of the social studies. Significant differences were found in behavior improvement and in interpersonal relationships, personal effectiveness in a social situation, and problem solving favoring the long-term treatment (p .001). No significant differences were found in academic achievement. Subjects with behavior patterns such as hyperactivity, perseveration, and a slower rate of learning needed a longer period of placement in a special class or resource room. Conclusions were that a differential program design might provide a better learning situation for emotionally handicapped students who exhibit characteristics of the minimally brain damaged, and that a continuum of services such as special classes, resource rooms, and special placement in the regular class should be provided. (Author/RP)

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EDUCATIONAL PROGRAMMING IN SIMULATED ENVIRONMENTS FOR SERIOUSLY EMOTIONALLY HANDICAPPED JUNIOR HIGH SCHOOL STUDENTS

September 1968

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FINAL REPORT

Project No. 7-0985
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September 1968

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EDUCATIONAL PROGRAMMING IN SIMULATED ENVIRONMENTS FOR SERIOUSLY EMOTIONALLY HANDICAPPED JUNIOR HIGH SCHOOL STUDENTS

SUMMARY

This study of fifty-eight first-year junior high students, a continuation of a three-year elementary school study, investigated the effectiveness of various schedules of a simulated environments technique on emotionally handicapped adolescents. Participants in the current project were the remaining population from sixty-four subjects who had been identified at the elementary level as emotionally handicapped but whose clinical evaluations had not exhibited evidence of neurophysiological impairment or subnormal intelligence. One-half of the subjects who had received the simulated environments technique for three years at the elementary level were randomly placed in schedules and continued to receive the experimental treatment while the other half received the conventional treatment. Likewise, approximately one-half of those who had received the conventional treatment in the elementary schools were randomly placed in schedules to receive the simulated enviornments treatment.

This technique consisted of a combination of teaching strategies employed in a set of procedures, including role playing, and implemented in the unit framework of the social studies. The experimental technique was utilized in the regular classroom during the fourth year, with a resource room which served as a retreat in crisis situations and provided for such activities as small group work and individualized instruction. Comparisons were made by analysis of variance and other statistical procedures to determine differences in academic achievement and measures of behavior.

The results of the study reveal that the long-term simulated environments treatment is significantly more effective than the conventional treatment in terms of behavioral change (personal and social adjustment). In terms of academic achievement this conclusion is suggested less strongly. The various schedules of the simulated environments technique were equally effective in terms of behavioral change, however, the pattern is indefinite in reference to academic achievement but suggests that the four-year simulations schedule is the most effective and the conventional schedule the least effective. There were no significant differences in terms of academic achievement among the non-project regular classroom students.

Behavior patterns which appeared to militate against full-time

placement of the subjects into the regular classroom included hyperactivity, perseveration, distractibility, immature behavior, and a slower rate of learning. These data suggest that a differential program design for emotionally handicapped children exhibiting characteristics of the minimally brain damaged and for those emotionally handicapped not exhibiting these characteristics might provide a better learning situation for both groups. For the emotionally handicapped student who can participate part time in the regular classroom, the resource room appears to provide needed support during the transition period. The teacher's key role in rating and evaluating individual behavior is confirmed by close agreement between teacher perception and psychologists' evaluations.

There is sufficient evidence in the objective and in the subjective observations, such as comments from students, teachers, principals, and others, to encourage further study and application of the experimental treatment with a larger number of subjects.

I. INTRODUCTION

A. Problem and Rationale

The crucial need for educational programs for emotionally handicapped adolescents is reflected in the high incidence of emotional handicap at the junior high level. Recent studies indicate that approximately ten per cent of the junior high school population is seriously disturbed. One of the periods of susceptibility to emotional distress occurs at about the time a student enters junior high school. Even for the comparatively normal young person this period of transition is a trying one; for the emotionally handicapped it can be an extremely critical one.

Despite the fact that mental illness ranks first among the nation's health problems, the general public and school personnel have been slow to recognize the importance of their roles in the mental health movement. The critical shortage of personnel in the mental health professions is indicative of the need for greater involvement of the schools in the prevention, identification, and treatment of emotional handicap. There are further indications that the schools can and should play a major role in the development of healthy personalities and in the treatment of children and youth handicapped by emotional problems. To acknowledge the school's role in mental health implies a willingness on the part of the educators to assume professional responsibility for programs which implement in action those familiar goals and objectives which characterize the modern school curriculum as the educational right of all youth.

In the beginning years of adolescence the relationship an individual maintains with his peers can be used as a rough measure of his social and emotional adjustment. The emotionally handicapped population in this study had in the past made slow progress in peer relationships and in other aspects of personal and social adjustment. They tended to be rejected by their age mates, to be anxious, self-centered, isolated, withdrawn, and unhappy. Whether their behavior was overtly hostile, aggressive or anxious, apathetic or withdrawn, they needed many opportunities to release hostile feelings, to interact with others, to learn to cope with the environment. It was the intent of the study to determine whether the unique features of the simulated environments technique might provide such opportunities.

Since social studies provides unique experiences in the process of living, working, and learning together, this content area was chosen to implement the simulated environments technique. The technique is implemented in a set of procedures which revolve around a role playing strategy. It calls for a particular emphasis on group-centered activities; on interaction in group enterprise; and, most important, on individual and group involvement in the planning, production, and evaluation of learning experiences. In such an environment the rejected, isolated, apathetic, or hostile adolescent is provided many opportunities to learn the human

relations skills which are becoming increasingly more important in a complex society.

Teaching strategies were investigated in which disturbed youngsters, through repeated practice in simulated environments, were allowed many opportunities to interact with peers and adults. The experimental treatment was administered in the regular social studies classroom with a resource room[1] provided for remedial instruction and crisis situations; this practice is in contrast to the majority of public school programs, which appear to be dedicated to the special class concept, though there is little supporting evidence that this type of placement is superior to other types.

The project effort was directed toward the creation of a learning environment in which troubled children, while under the guidance of professionals who understood, respected, and accepted them, might develop a sense of their relationship with their culture and of their responsibilities as contributing members of a social group. Recognizing that many of the emotional problems interfering with learning exceed the scope of the school, this project concentrated on the question of whether modifications in curriculum and methodology could serve a psychoeducational function. The teaching strategies investigated to this end were those of the simulated environments, with concurrent teacher-psychologist consultation and supervisory services.

The major objective of this study was to test the effectiveness of the utilization of the various schedules[2] of the simulated environments technique with emotionally handicapped students at the junior high level. More specifically the study was designed to answer the following questions:

1. Is the long-term simulated environments treatment significantly more effective than the conventional treatment in terms of academic achievement and behavioral change?

2. What is the relative effectiveness of the various schedules of utilization of the simulated environments technique in terms of academic achievement and behavioral change?

3. What is the effect of the simulated environments technique on the non-project regular class students in terms of academic achievement?

4. What behavioral patterns militate against the full-time integration of the emotionally handicapped into the regular classroom?

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1 See Resource Room, p. 8

2 See Table II, p. 7

B. Related Research

A review of literature reveals varied and diverse methods, procedures, and approaches being utilized in educating the emotionally handicapped. This diversity is indicated by a research analysis on public school classes for the emotionally handicapped by Morse, Cutler, and Fink (1964), which notes "an amazing lack of specific pattern and uniformity in approach" to the psychoeducational problems of these students. Cohen's report (1963) on the "academic activity program" for adolescent boys in an institutional setting stresses the highly motivating effect of group-centered activities in psychoeducational programming. Deem and Porter (1966) found more specifically that role playing was one means of eliciting pupil response in a variety of situations; they noted further that it appears to accelerate pupil progress and to support the total reeducation process of the emotionally handicapped adolescent.

The simulated environments technique was developed initially by Coleman and Boocock (1965) for high school and college students. Early experimentation with the simulations reported by Coleman and Boocock indicate that this technique is a "powerful motivator for learning" and gives the learner a greater competency in coping with his environment and a heightened ability to see a complex social situation as an organized whole. The authors' initial experimentation in the use of games with simulated environments indicates that this technique produces two major forms of learning: (1) intellectual learning, which involves the content of the activity and (2) social learning, which includes learning about others, about one's self, and about the expectations and obligations of role relations.

Cherryholmes (1966), in his evaluation of six studies to determine the effectiveness of educational simulations, concluded that although students when participating in a simulation did reveal more interest and motivation (i.e. learning related to social-psychological interactions) than when engaged in more conventional classroom activities, they did not seem to learn more facts or principles in the simulated activity than they did by conventional methods. Cherryholmes offered as a possible explanation the fact that the simulations in the six studies were presented to the participants, and that the students did not discover structural relationships in the simulations.

Miller (1967) in testing the effectiveness of the simulated environments technique with emotionally handicapped elementary school children found this technique to have a significantly positive effect on developing better interpersonal relationships; on improving personal effectiveness in a social situation; and on applying problem-solving and reflective thinking skills to social issues. The author found this to be true regardless of whether the students were receiving the experimental treatment in regular or in special classes.

II. METHODS

A. General Research Strategy

Participants in the junior high school study were the remaining project population from those screened and identified in 1964 for Miller's initial study (1967) with elementary emotionally handicapped pupils. For the screening and identification and for experimental phases of the initial project, the third grade population of a region surrounding and including the Glen Burnie area of Anne Arundel County, Maryland was examined for the study. Pupils from urban, suburban, and rural sections are served by schools of this region. Sixty-four of the identified population, whose clinical evaluations did not present evidence of neurophysiological impairment or subnormal intelligence, were randomly assigned to the treatment groups (Table I). Of these 64 subjects, 58 remained for the junior high project.

Approximately one-half of each of two groups (Cells A and B, Table I) were randomly selected to continue to receive the simulated environments technique (Schedule I. Table II), while the remaining one-half of each group (Cells A and B, Table I) were randomly selected to receive the non-simulated (conventional) treatment (Schedule II, Table II).

In addition, approximately one-half of each of two other groups (Cells C and D, Table I) were randomly selected to receive the simulated environments technique (Schedule III, Table II), while the remaining one-half were randomly selected to continue to receive the non-simulated treatment (Schedule IV, Table II). Table II illustrates the design which was utilized in the present study.

TABLE I

Treatment and Grouping of 64 Pupils in Initial Project (1964-67)

Treatment	Special Class	Regular Class	Totals
Simulated Environments	Cell A 20 Subjects (2 classes of 10 each)	Cell B 12 Subjects (3 in each of 4 classes of 30)	
Non-Simulated Environments	Cell C 20 Subjects (2 classes of 10 each)	Cell D 12 Subjects (3 in each of 4 classes of 30)	
Total	Subjects 40 Teachers 4 Aides 4	Subjects 24 Teachers 8	64 12 4
Total number of children (non-project regular classes and special classes)			280
Schools			6

TABLE II

Treatment and Grouping of 58 Junior High Students from Initial Project for Present Project (1967-68)

Schedules of Utilization of Simulated Environments Technique		Population (1-5 students to each of 21 regular classrooms)
Elementary and Junior High (4th through 7th grades)	I	15 Subjects
Elementary Only (4th through 6th grades	II	15 Subjects
Junior High Only (7th grade only)	III	14 Subjects
None Non-Simulated - Conventional Treatment (4th through 7th grades)	IV	14 Subjects
Total		Subjects 58* Teachers 24 Aides 3
Total number of children (Emotionally handicapped and normal)		Approx. 530

*Because of various factors unrelated to the project, six of the original students were no longer available for the fourth year of study.

B. Organization of Resources

1. Resource Rooms

Although the treatments were administered in the regular classroom, using the social studies content, each of the four[1] junior high schools was to provide a resource room for part-time placement of those members of the project population whose evaluations indicated a need for this facility. All project students were based in regular classrooms. The resource rooms were used for remediation in the academic subjects, for educational games[2], for completing assignments made in the regular classroom, and for crisis situations.

2. General Staff Functions

The chief investigator and the coordinator supervised the experimental teachers, aided in developing curricular materials, demonstrated the experimental technique in the classrooms, and participated in workshops and in-service training meetings.

The chief psychologist acted as consultant to all project teachers on a scheduled and emergency basis, aiding them in understanding and managing deviant behavior. He also administered projective tests and, together with the chief investigator, evaluated the findings. When requested by the parent or the staff, the psychologist was available for parent interviews and counseling.

The public health nurse acted as liaison between the local health department and the staff, coordinated the activities of other nurses assigned to the individual schools, made home visits to collect data for the comprehensive history of each subject, and arranged medical consultations for students and parents.

Special consultants serving on the staff included specialists in the education of the emotionally handicapped, a pediatrician, a psychiatrist, and a neurologist.

The building supervisors and the supervisor of special education supervised the teachers of the conventional groups.

3. Teacher Selection

The assistant superintendent of secondary schools and his staff

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1 Although the project design specified four resource rooms, only three became available in implementation.

2 See Appendix, p. 64

selected the teachers for all groups. The criteria for selection of teachers included:

a. Willingness to experiment

b. An understanding of child development principles

c. A flexibility in utilizing teaching strategies

d. Ability to work successfully with other teachers and the administrative staff

4. Teacher and Staff Training

A one-week summer workshop was held in August for orientation and training of the teachers. Specialists in the area of the emotionally handicapped acted as consultants for this workshop as well as for in-service training meetings during the school year. The following types of training were included for participating teachers:

a. Orientation to the research design

b. Instruction in characteristics of emotionally handicapped students and in ways of managing their deviant behavior

c. Instruction in remedial techniques for the academic subjects

d. Instruction in the simulated environments technique (for experimental teachers

e. Development of curricular materials

5. Parent Participation

In all groups parents participated in the following manner:

a. Parent-teacher conferences in the school or home

b. Consultations with the research staff psychologist when requested by the staff or the parents

C. Curriculum

1. Simulated Environments Technique[1]

This program of research employs a simulated environments technique, developed through the unit approach, in teaching social

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1 For example, see Appendix, p. 47

studies to emotionally handicapped junior high students in regular classes. Social studies content was chosen to implement the simulated environments technique, because of the unique attention given to processes of living and working together, and to the use of the environment in meeting basic human needs. Furthermore, the unit organization is a structure widely employed in teaching the social studies. The experimental technique is thus an extension of an established method of teaching. The unit permits the adaptation of the content to the interests and experiences of the group, the incorporation of new and innovative materials and techniques, and revision based on group evaluation; moreover, it provides opportunities for the functional use of basic skills. The unit organization lends itself to the use of the simulated environments technique as an operational base for planning, guiding, and evaluating group activities.

In practice, students cannot be placed in real-life environments, but simulated environments can be constructed. The simulated environments technique is a combination of teaching strategies which bring situations and problems within the cognitive structure of children. It has the added advantage of involving them emotionally. The strategies employed are included in a set of procedures[1] which constitute an extended preparation for role playing. Although role playing is only one of the steps included in the utilization of the simulations, it is the core around which the technique revolves. Role playing appears to be of value to the disturbed child because it frees him to explore new situations in real-life environments and to experience them from a new point of view. It allows him to assume a different identity for a brief time and frees him from the limitations and biases of his own ego. Having for a time set aside the negative self-concept, he is better able to ventilate and release deep feelings which he might consider forbidden in his own role. Experimentation with this technique indicates that the disturbed child, when he reassumes his own identity, can relate his newly-gained insights to his own life situation.

The procedures, briefly stated, begin with problem situations which are discussed in large and small groups. The problem is analyzed, consequences are anticipated, and ideas are expressed. Pupils choose the roles they wish to assume, set the stage for the role-playing activity, and enact the problem situation. Tentative solutions are reached, and evaluations are made by the participating observer.

The teacher remains noncommittal as possible solutions are proposed by class members, concurring only when students have reached a valid and acceptable conclusion. As a reinforcement for learning and as a variation on the group process, educational games[2] are also devised and utilized.

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1 For examples, see Appendix, p. 47

2 For examples, see Appendix, p. 64

In general, these procedures are carried on in the regular classroom. A resource room provides for such activities as small group work or individual assignments and serves as a retreat in crisis situations.

The teacher, in this frame of reference, assumes the role of a helper and guide who stimulates and directs human relations, builds group cohesiveness and morale, encourages and supports individuals in the group effort, and facilitates problem-solving approaches to real-life situations in learning.

The teacher's understanding of the learner is, in this setting, more important than his understanding of subject matter; his ability to establish communication and rapport with each member of the group is of equal importance to his facility in communicating to the entire group. The group-centered activities, by their very nature, subordinate the need for the teacher to dominate, manipulate, lecture, or to make decisions for the learner in the learning situation. This technique provides more opportunities for the teacher to observe behavior and interact with the students; thus it enables him to understand and to honor the unique characteristics of the emotionally handicapped.

2. Contrast Environments

The regular classes utilized methods prescribed by the Anne Arundel County social studies guides. The methodology reflects a traditional type of programming, i.e. the use of basic textbooks, total class and individual participation, total class and teacher planning, incidental and group work, etc. The teacher, in this setting, tends to assume the role of disciplinarian and information expert.

D. Method of Analysis

Analysis of Data[1]

For the three variables of the Social Awareness Scale and the seven variables of the Iowa Tests of Basic Skills, a one-way analysis of variance was applied to the scores of the subjects as arranged in the schedules in Table II[2]. For those variables where a significant F-value indicated differences among the cells, individual (pairwise) comparisons were made for each possible pair of cells.

For the analysis of each variate the corresponding 1964 (pretest) score was used as a covariate. The analysis was carried out utilizing a standard Multivariate Analysis of Variance program[3] and the

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1 For description of tests and scales, see Appendix, p. 35

2 See Table II, p. 7

3 Multivariate Statistical Programs, Dean J. Clyde, Elliott M. Cramer, Richard J. Sherin, Biometric Laboratory, University of Miami.

computing facilities of the University of Maryland.

The assumption that each variable is normally distributed with equal variances among the cells was not examined at this time. However, the F-test for Miller's initial study (1967) had found these variables to be appropriate for analysis.

The projective test ratings and the subtests of the Behavior Rating Scale cannot be assumed to be measured on an interval scale. Therefore, contingency tables were compiled for these variables and calculated χ^2's were examined to test whether scores are independent of cell placement.

III. FINDINGS AND ANALYSIS

A. Analysis of Variance

1. Social Awareness Scale[1]. Pretest scores for the three SAS variables were obtained in November 1964, as described in Miller's initial report (1967). For the current study the analysis of variance was carried out for the 1968 data as described in Section II, D, for each variable of the SAS. The corresponding 1964 score was used as a covariate. Analysis of variance tables are presented in Tables I, II, III of the Appendix.

There was a significant difference among the groups ($P < .001$) for each of the three subtests. In making the pairwise comparisons the mean of Schedule IV, the group receiving conventional treatment, was always significantly lower than the means of experimental groups, Schedules I, II, and III, indicating that the behavior of groups who had experienced the simulations technique for either one, three, or four years was superior to that of Schedule IV, the group receiving the conventional treatment for four years.

2. Iowa Tests of Basic Skills. The analysis of variance for this study was carried out as described in Section II, C, for the 1968 scores on each of the seven variables, both for the project population and the normal population. The 1964 score obtained at the beginning of the study was used as a covariate. For the normal children there were no significant differences among the four schedules.

For the project population significant differences were found on vocabulary, reading, and composite subtests favoring the

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1 For description of the Social Awareness Scale, see Appendix, p. 40

simulated environments groups. The significant contrasts[1] found were

a. The mean of Schedule I is higher than the mean of Schedule IV ($P < .05$) for the vocabulary score.

b. The mean of Schedule I is higher than the mean of Schedule II ($P < .01$) for the reading score.

c. The mean of Schedule III is higher than the mean of Schedule II ($P < .05$) for the reading score.

d. The mean of Schedule I is higher than the mean of Schedule II ($P < .05$) for the composite score.

B. Non-Parametric Analysis

1. Behavior Rating Scale. Initial ratings on the five BRS variables were made in October 1964. χ^2's were computed for contingency tables[2] constructed to compare the four schedules with respect to the 1964 and 1968 scores. No significant differences were found for the 1964 scores. The 1968 scores showed significant differences on "Immature Behavior" and "Depressive Mood" ratings. These differences, in both cases, appeared to be due to the larger number of low scores for Schedule IV, noted in III A above. The four schedules were combined in contingency tables to compare the 1964 and 1968 scores. For all five ratings the 1968 scores were significantly higher than the 1964 scores.

2. Projective Test Ratings. The 1968 test protocols were rated by the psychologist to indicate "decline," no change," or "improvement" for each subject and designated by "-", "0", or "+" respectively. Eight of the subjects showed a decline, ten showed little or no change, and twenty-six showed improvement in personality function for the fourth year of study. A contingency table was prepared, pooling those students with ratings of "-" or "0" into one category and those with "+" ratings were placed in another category. An observed Chi-square of 1.55 was obtained which was nonsignificant.

C. Discussion

1. Primary Findings. With respect to the specific questions (p. 4) which the study was designed to answer, the findings suggest the

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2 The contingency tables are presented in Tables XI to XV of the Appendix, p. 30-34

1 Analysis of Variance Tables are presented in Tables IV to X in the Appendix, p. 27-29

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following:

a. The long term simulated environments treatment is significantly more effective than the conventional treatment in terms of behavioral change (personal and social adjustment). In terms of academic achievement this conclusion is suggested less strongly.

b. The various schedules of the simulated environments technique were equally effective in terms of behavioral change. The pattern is indefinite in reference to academic achievement but suggests that Schedule I is the most effective and Schedule II the least effective.

c. There were no significant differences of the simulated environments technique in regard to academic achievement among the non-project regular classroom students.

d. Behavior patterns which appeared to militate against full time integration of the emotionally handicapped subjects into the regular classroom were hyperactivity, a higher degree of depression and anxiety, perseveration, distractibility, immature behavior, and a slower rate of learning.

The evidence for these conclusions is pointed out in the following discussion:

Differences among schedules as measured by the Social Awareness Scale indicate a positive effect in those schedules utilizing the simulated environments treatment. It was noteworthy that Schedules I, II, and III - students who had experienced the simulated technique for one year, three years, or four years - showed significant difference from Schedule IV. Subjects improved significantly more in behavior as measured by SAS than those subjects who received the conventional treatment ($P < .001$). This finding continues the same trend noted in 1967 when consistent differences were found favoring the simulated environments treatment. It would appear that behavior in the classroom improves to a significant degree if the child has experienced at least one year of the simulated environments curriculum. The Social Awareness Scale appears sensitive to such change in behavior.

Results of the Iowa Tests of Basic Skills indicated that the group receiving four years of simulations (Schedule I) showed significantly more improvement in vocabulary than those who experienced the conventional treatment (Schedule IV); in reading, for the groups receiving four years of simulations (Schedule I) as compared to the group which had simulations three years but conventional curriculum the fourth year (Schedule II), and for Schedule III which received simulations for one year only as compared to the group receiving the experimental treatment for three years (Schedule II). In addition, on the composite scores the four year simulations group (Schedule I) was superior to the three year group (Schedule II). This would suggest

that the long term treatment is, in general, more effective, particularly if continued into the first year of junior high school.

The introduction of the simulations curriculum for the one year would appear to be of importance in improving reading for the project population, whereas to terminate an ongoing program is rather crucial for emotionally handicapped children. Notably, however, although achievement scores did not improve as much for the Schedule II group, behavior patterns, as measured on the SAS, did show gains.

While vocabulary and reading skills as well as overall composite scores showed significantly more improvement in some schedules than in others, variables measured by the test did not show a differential effect. It is of interest, however, that none of the experimental groups showed any decline during the course of the simulations treatment; therefore, no deterrent to learning was caused by the simulations technique.

There were no significant differences in achievement, as measured by the ITBS, for the non-project normal classroom children. This finding differed from that of Miller and Ward's Interim Report (1967) which found significant differences favoring the experimental groups on the following variables: work-study skills, reading, arithmetic problems and concepts, and composite scores.

The Behavior Rating Scale results indicate a significant overall gain for the four years for all schedules, and a relatively greater improvement in Schedules I, II, and III than in Schedule IV in regard to "Immature Behavior" and "Depressive Mood." Schedule IV showed some gains but relatively fewer than the other three groups. On other measures, such as projective tests, "Immature Behavior" was found to be a factor in those who failed to make adequate adjustment to peers; such peer relationships seemed crucial to progress in school.

Quantitative interpretations derived from the TAT and the Rorschach protocols indicated that the changes in personality function were evenly distributed throughout the four schedules. This observation is consistent with previous findings which compared groups over a three-year period. The trend, however, was toward better adaptation by the two groups in the experimental classes during their first year of junior high. Since the ratings represent different degrees and levels of function by each subject, group comparisons are not truly representative of the qualitative changes which were observed in each child.

There was a differential effect noted between the sexes when traits were compared for the fourth year. Fifteen of the thirty-one boys remaining in the study improved in regard to personality dynamics, indicating more consistent control of affect, more mature judgment, less violent fantasy, and increased problem solving ability. Of the thirteen girls remaining, ten improved in regard to such factors as achievement, acceptance by peers, ability to solve problems, and mature behavior.

Although both boys and girls exhibited greater ability in problem solving skills, they showed differences in other respects. The girls became more conforming and developed better relationships with their peers, while the boys gained more control of their feelings and experienced less violent fantasy. These differences might be expected at this age because of the different rate of maturation for boys and girls.

Treatment effects may have been masked by possible placebo effects - improvement due to enthusiasm by teachers and other staff members which may have added unknown increments to all groups, perhaps unevenly. If such placebo effects were randomly distributed, however, the true treatment effects should still have been observed if the other variables contributing to error were random, and if the instruments used were sensitive to treatment effects. Limitations of the study include the relatively few N in each schedule, possible insensitivity of some of the instruments, and absence of controls for placebo effect.

The investigators found the reception to the idea of adding a research program to the schedule of junior high schools quite varied. Some principals initially apathetic displayed increased interest as they gained understanding of goals and became openly enthusiastic when they finally realized the possible effects on students. In contrast, one principal who seemed interested initially became less enthusiastic through the year. As there was also some resistance from the staff, it appears that internal problems may account for much of this reaction.

Teachers varied from those with a firm, consistent, and stable approach to the project and its subjects to those who saw the project as an unpleasant added burden to their work load. Personality differences also played a major role in the degree of participation by each teacher. Among teachers as among the pupils, these variables could not be controlled but must be taken into account in evaluating the results of the study.

2. Additional Findings and Comments. Though the initial diagnoses had portended to eliminate children showing neurophysiological dysfunction, the eighteen subjects who participated part-time in the resource rooms for the fourth year demonstrated characteristics often found in minimally brain damaged children. Only two of the subjects assigned to full-time placement in the regular classroom displayed such traits. The eighteen subjects continued to exhibit such behavior patterns as hyperactivity, perseveration, and continued learning difficulty. In spite of these latter results, the subjects assigned part-time to the resource rooms for the fourth year showed improvement in academic achievement and personality functioning, although at a slower rate than those placed in regular classes. This finding suggests that a differential program design for the emotionally handicapped children exhibiting characteristics of the minimally brain damaged and for those emotionally handicapped not exhibiting these characteristics might provide a better learning situation for both groups.

It is worthy of note that only one member of the project population was excluded from school because of behavior problems during the four years of the project's operation. Nor did any of the subjects receive psychotherapy during this period. Though parents were consulted in emergency situations and participated in small group discussion sessions for ten weeks during the study, intensive work with them was not undertaken.

Although the original research design (special class vs. regular class) was retained throughout the study for statistical results (pre and post tests), interim evaluations suggested the current design for phasing out of the federally-funded project. The treatments were administered in the regular classroom, the resource room facility and program providing support in remedial education and crisis situations for those emotionally handicapped individuals who needed this additional support.

One of the most gratifying aspects of the project was the high degree of involvement of the seventh grade students in the development of curricular units and in other activities utilizing the simulated environments technique. Sample units, games, and other materials had been prepared and presented initially to the teachers as working models. The creativity and resourcefulness of both teachers and children in field-testing, planning, developing, and implementing this technique on the junior high level exceeded expectations.

The following comments from students, teachers, principals, and others provide a flavor of the interest, motivation, and enthusiasm for the experimental treatment.

Comments from Students

- This way of learning has helped me work out problems by myself ... before I had to have a lot of help. I understand what I learn better than I did with the old way of teaching.

- I thought I was "dumb" ... after working with our group to do a simulation, I could give my own ideas and they liked them.

- My teacher pays more attention to my ideas ... before, some teachers made me think they didn't care about my ideas and wouldn't listen to me.

- It is fun working in small groups ... you learn more from each other ... everybody gets lots more information when we do research. I like the role playing part. You really have to know a lot about a subject to play the roles right.

- I've learned to speak before the class without being scared stiff!

- Being chairman of different groups has helped me ... you really

have to study in case your group chooses you as their chairman.

- You learn how to make decisions ... I learned how in grade school in the simulations and I wasn't so afraid to come to junior high school.

- They [simulations] make you feel proud of yourself and the other kids like you better. The games really are fun and you learn more when you play them.

Comments from Teachers

- The simulated environments technique has helped me become a better teacher ... it was hard to release the reins at first, but I have few discipline problems now.

- The pupils are allowed more freedom to learn on their own, and I have many more opportunities to observe them as they are working in small groups.

- It encourages interdependence as well as independence in learning. Even the slower learners can work at their own level and make contributions to their group.

- It teaches the pupils to give and take. They accept criticism from the group when they might not accept it from me.

- The pupils do much more reading with this technique ... Even math becomes interesting to them when we have activities in social studies that require solving math problems.

- You don't have to talk about good sportsmanship, etc. It is an integral part of the process of working together.

- The emotionally handicapped children enter into all activities with some guidance from me and encouragement by their classmates.

Comments from Principals

- I couldn't believe that some of these teachers could become so flexible in their approach to teaching the social studies.

- When these curriculum materials become available, we want to use them with all our teachers. If the method helps emotionally handicapped, it should help all children.

- Although some of the classes are somewhat noisy at times, there are hardly any discipline problems in the classes now. I like this method of teaching because the students appear to play an important role in planning their own learning experience.

- The teachers seem to like this plan and some of them are better

social studies teachers this year. I don't know if this technique was responsible or not.

Comments from other Observers

Building Supervisor of Secondary Schools - The simulations appear to organize the learning situation. The pupils appear to be highly motivated.

State Department Supervisor - This technique offers an interesting contrast to teaching the social studies for all pupils. The emphasis on problem solving in simulated situations adds impetus to Dewey's theory.

Out-of-State Supervisor of Special Education - The resource room appears to provide a much needed aspect in a continuum of services for emotionally disturbed children.

Parent - My child was a "trouble maker" at home and at school. He has changed so much in three years ... he accepts responsibility and considers our wishes now.

IV. CONCLUSION

The conclusions which are suggested by the data in this study can be summarized as follows:

A. The long-term simulated environments technique is significantly more effective than the conventional treatment in terms of behavioral change. In terms of academic achievement, this conclusion is suggested less strongly.

B. The various schedules of the simulated environments technique were equally effective in terms of behavioral change. The pattern is indefinite in reference to academic achievement but suggests that the long-term treatment (four years) is the most effective and that the three-year treatment ending at grade 6 is the least effective. This latter finding may indicate that terminating an ongoing program is rather crucial for emotionally handicapped students, particularly at the beginning of their junior high program.

C. There is no differential effect among the various schedules of the simulated environments technique in terms of academic achievement among the non-project regular classroom students. This finding differs from the results of the two-year treatment which indicated that the experimental treatment was significantly more effective than the conventional treatment, as measured on the ITBS, in the following variables: work-study skills, reading, arithmetic problems and concepts, and composite scores. This might suggest that a short-term (two years) employment of the simulated environment technique is more effective than the long-term (four years) treatment for students who have not been

diagnosed as emotionally handicapped.

D. Subjects who exhibit such behavior patterns as hyperactivity, perseveration, immaturity, and a slower rate of learning need a longer period of placement in a special class or resource room before full-time integration into a regular classroom.

E. A continuum of services for the emotionally handicapped should be provided in the public schools, i.e., special class, resource room for part-time placement, and special placement in the regular classroom with consultative services provided for the classroom teacher.

F. Differential program planning and design for emotionally handicapped students who exhibit behavior patterns of minimally brain damaged children and for those who are emotionally handicapped and do not possess these characteristics.

G. For the emotionally handicapped student who can participate part-time in the regular classroom, the resource room appears to provide needed support during the transition period.

H. The teacher's key role in rating and evaluating individual behavior is confirmed by close agreement between teacher judgment and psychologists' evaluations.

There is sufficient evidence in the objective data and in subjective observations, such as comments from students, teachers, principals, and others, to encourage further study and application of the experimental treatment with a larger number of subjects.

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Miller, Rozelle J., Educational Programming in Simulated Environments for Seriously Emotionally Handicapped Elementary School Children: A Final Report. This three-year project was partially subsidized by a grant from the Office of Education, U.S. Department of Health, Education, and Welfare, Maryland State Department of Education, Baltimore, Maryland, 1967.

Morse, William C., Cutler, Richard L., and Fink, Albert H., Public School Classes for the Emotionally Handicapped: A Research Analysis. A Project of the Council for Exceptional Children, N.E.A., The Council for Exceptional Children, Washington, D.C., 1964.

APPENDIXES

TABLES

TABLE I

SAS INTERPERSONAL RELATIONSHIPS

Source of Variation	d.f.	M.S.	F
Schedule	3	96,290.0	7.29**
Regression	1	15,988.7	
Within Cells	39	13,211.9	

≠1964 score used as covariate with regression coefficient 0.238

** P<.001

The following contrasts were found to be significant:

Schedule I > Schedule IV; F = 19.4, P < .001

Schedule II > Schedule IV; F = 13.0, P < .001

Schedule III > Schedule IV; F = 15.0, P < .001

TABLE II

SAS PERSONAL EFFECTIVENESS

Source of Variation	d.f.	M.S.	F
Schedule	3	120,393.1	7.87**
Regression	1	26,806.9	
Within Cells	39	15,305.8	

≠1964 score used as covariate with regression coefficient .375

** $P < .001$

The following contrasts were found to be significant:

Schedule I > Schedule IV; $F = 22.5$, $P < .001$

Schedule II > Schedule IV; $F = 16.6$, $P < .001$

Schedule III > Schedule IV; $F = 17.6$, $P < .001$

TABLE III

SAS PROBLEM SOLVING

Source of Variation	d.f.	M.S.	F
Schedule	3	149,350.3	10.28**
Regression	1	1,727.0	
Within Cells	39	14,522.8	

≠ 1964 score used as covariate with regression coefficient 0.110

** $P < .001$

The following contrasts were found to be sufficient:

Schedule I > Schedule IV; F = 29.2, $P < .001$

Schedule II > Schedule IV; F = 27.4, $P < .001$

Schedule III > Schedule IV; F = 26.6, $P < .001$

TABLE IV

I.T.B.S.
VOCABULARY

Source of Variation	d.f.	M.S.	F
Schedule	3	545.0	3.85*
Regression	1	4,471.2	
Within Cells	39	141.5	

* $P < .05$

The following contrast was found to be significant:

Schedule I > Schedule IV; $F = 6.01$, $P < .05$

TABLE V

I.T.B.S.
READING

Source of Variation	d.f.	M.S.	F
Schedule	3	571.8	4.98**
Regression	1	5,369.1	
Within Cells	39	114.8	

** $P < .01$

The following contrasts were found to be significant:

Schedule I > Schedule II; $F = 10.13$, $P < .01$

Schedule III > Schedule II; $F = 5.01$, $P < .05$

TABLE VI

I.T.B.S.
SPELLING

Source of Variation	d.f.	M.S.	F
Schedule	3	240.6	1.06
Regression	1	11,518.9	
Within Cells	39	226.5	

TABLE VII

I.T.B.S.
WORK-STUDY SKILLS

Source of Variation	d.f.	M.S.	F
Schedule	3	306.0	1.96
Regression	1	3,391.0	
Within Cells	39	156.2	

TABLE VIII

I.T.B.S.
ARITHMETIC CONCEPTS

Source of Variation	d.f.	M.S.	F
Schedule	3	41.0	0.27
Regression	1	2,764.9	
Within Cells	39	150.0	

TABLE IX

I.T.B.S.
ARITHMETIC PROBLEMS

Source of Variation	d.f.	M.S.	F
Schedule	3	198.5	0.77
Regression	1	1,087.8	
Within Cells	39	258.5	

TABLE X

I.T.B.S.
COMPOSITE SCORES

Source of Variation	d.f.	M.S.	F
Schedule	3	230.2	2.85*
Regression	1	4,233.1	
Within Cells	39	80.7	

* P = .05

The following contrast was found to be significant:

Schedule I > Schedule II; F = 5.80, P < .05

TABLE XI

BRS INABILITY TO LEARN

1964 Scores

	I	II	III	IV	Total
L	4	9	3	6	22
M	5	1	5	2	13
H	2	3	1	3	9

d.f. = 6

$\chi^2 = 8.2$

Not Significant

1968 Scores

	I	II	III	IV	Total
L	0	1	2	2	5
M	3	6	2	4	15
H	8	6	5	5	24

d.f. = 6

$\chi^2 = 4.9$

Not Significant

	1964 Total	1968 Total
L	22	5
M	13	15
H	9	24

d.f. = 2

$\chi^2 = 17.7$

$P < .01$

L (low) = 1, 2
M (medium) = 3
H (high) = 4, 5

TABLE XII

BRS INABILITY TO BUILD INTERPERSONAL RELATIONSHIPS

1964 Scores

	I	II	III	IV	Total
L	6	9	4	5	24
M	4	1	2	4	11
H	1	3	3	2	9

d.f. = 6

χ^2 = 5.1

Not Significant

1968 Scores

	I	II	III	IV	Total
L	1	3	1	4	9
M	3	6	4	6	19
H	7	4	4	1	16

d.f. = 6

χ^2 = 8.3

Not Significant

	1964 Total	1968 Total
L	24	9
M	11	19
H	9	16

d.f. = 2

χ^2 = 10.9

$P < .01$

L (low) = 1, 2
M (medium) = 3
H (high) = 4, 5

TABLE XIII

BRS IMMATURE BEHAVIOR

1964 Scores

	I	II	III	IV	Total
L	6	7	5	7	25
M	2	4	2	2	10
H	3	2	2	2	9

d.f. = 6

χ^2 = 1.1

Not Significant

1968 Scores

	I	II	III	IV	Total
L	1	1	4	5	11
M	8	7	0	5	20
H	2	5	5	1	13

d.f. = 6

χ^2 = 16.4

P < .05

	1964 Total	1968 Total
L	25	11
M	10	20
H	9	13

d.f. = 2

χ^2 = 9.5

P < .01

L (low) = 1, 2
M (medium) = 3
H (high) = 4, 5

TABLE XIV

BRS DEPRESSIVE MOOD

1964 Scores

	I	II	III	IV	Total
L	6	6	6	5	23
M	2	2	3	4	11
H	3	5	0	2	10

d.f. = 6

χ^2 = 5.7

Not Significant

1968 Scores

	I	II	III	IV	Total
L	0	1	1	2	4
M	5	3	1	8	17
H	6	9	7	1	23

d.f. = 6

χ^2 = 13.8

P < .05

	1964 Total	1968 Total
L	23	4
M	11	17
H	10	23

d.f. = 2

χ^2 = 19.8

P < .01

L (low) = 1, 2
M (medium) = 3
H (high) = 4, 5

TABLE XV

BRS HYPOCHONDRIASIS

1964 Scores

	I	II	III	IV	Total
L	5	2	4	2	13
M	2	2	4	2	10
H	4	9	1	7	21

d.f. = 6

χ^2 = 10.0

Not Significant

1968 Scores

	I	II	III	IV	Total
L	0	0	1	2	3
M	3	1	1	1	6
H	8	12	7	8	35

d.f. = 6

χ^2 = 6.4

Not Significant

	1964 Total	1968 Total
L	13	3
M	10	6
H	21	35

d.f. = 2

χ^2 = 10.8

$P < .01$

L (low) = 1, 2
M (medium) = 3
H (high) = 4, 5

DESCRIPTION OF TESTS AND SCALES

DESCRIPTION OF TESTS AND SCALES

The Social Awareness Scale

The Social Awareness Scale (SAS) was developed by the research staff because of the dearth of test instruments designed to measure adequately the changes sought from the utilization of the simulated environments technique. Available test instruments in the social studies tend to test for the acquisition of factual information or subject matter with virtually no emphases on evaluating the psycho-social aspects of learning - assessing the ability of the child to relate to and adjust to members of his society and to resolve his own problems through the utilization of problem-solving techniques.

The SAS serves as a teacher judgment evaluation. It is designed to measure changes in (1) interpersonal relationships, (2) personal effectiveness in a social situation, and (3) problem-solving skills. The first of these three primary factors reflects the child's ability to relate to others in a group situation. Scores on this factor indicate the teacher's assessment of changes in the child's ability to interact effectively in a group situation. The second factor is related to the child's awareness of himself - his self-concept - as he reacts in a groups situation. The teacher's estimation of this attitude is quantified by a rating or score. This judgment is inferred by observation of the child's performance in the group. The third factor is related to the child's ability to utilize problem-solving skills, to resolve problems inherent in the social studies area, and through practice in this procedure to develop a sensitivity to coping with his own problems and finally resolving them. Scores on this factor indicate the teacher's assessment through observation of the child's ability to apply these skills.

Iowa Tests of Basic Skills

The Iowa Tests of Basic Skills is a standard achievement test used not only to measure status on various skills as compared with class, school, county, and national norms, but to reflect growth as shown by gains in scores. Five major areas are measured: Vocabulary, Reading, Language, Work-Study Skills, and Arithmetic.

For the purposes of this study, Vocabulary, Reading, Spelling, Work-Study Skills, Arithmetic Concepts, Arithmetic Problems, and Composite Scores were obtained for the project children as well as for the normal children in the large classrooms. Comparisons between groups and for each child cumulatively were made each year.

The Wechsler Intelligence Scale for Children

The Wechsler Intelligence Scale for Children was developed by David Wechsler in 1949; it is based on extensive research and experience with the Wechsler-Bellevue Intelligence Scales. The Scale,

widely employed in clinical and research work, yields not only an intelligence quotient for verbal and performance tasks but also scaled scores for as many as twelve essentially separate mental functions. A prorated score for verbal and performance sections of the test was calculated on the Comprehension, Similarities, and Vocabulary subtests, and on the Picture Completion, Block Design, and Coding tests as well. These subtests were considered tobe the most useful ones in determining intellectual functioning for the sample. They refer to such mental functions as judgment, verbal abstracting, and word knowledge; attention to details, eye-hand coordination, and learning new material. Each aspect of the test cuts across other groups of factors, although in general the mental characteristic measured has some unique quality (i.e., memory, concentration, etc.).

The "deviation I.Q." and not Mental Age is the basic concept for the construction of the WISC. A child's performance on the test is compared with the average performance of other children in his own age group. The amount by which the individual deviates above or below the average I.Q. (M = 100) of individuals of his own age group is called the deviation I.Q.

For this study, comparisons over a two-year period were made on the six subtests, as well as on the Verbal, Performance, and Full-Scale I.Q.

The Rorschach Test

Developed by Hermann Rorschach in Switzerland, the Rorschach Test has been widely utilized in this country in the last thirty years; it is still being refined and studied. The purpose is essentially to provide a standardized situation in which behavior can be observed, with the assumption that it will "be possible to predict other kinds of behavior ... in other situations."[1] It provides an ambiguous stimulus situation which appears to enable the subject to reveal his unique functioning.

While scoring is of importance as "shorthand" for hypotheses or inferences about personality dynamics, for the purpose of this study, scores based on Beck's method were derived but were not analyzed formally. Rather, individual changes in such factors as content, sequence, form level, affective responses, and other determinants were observed and evaluated.

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1 Klopfer, Bruno; Ainsworth, Mary D.; Klopfer, Walter G.; and Holt, Robert R. "Developments in the Rorschach Technique." Harcourt, Brace and World, 1954.

Though different administrators were required at different times, Beck's method of scoring was used throughout. At the end of the first two years of study, two evaluators reviewed the projective tests and carefully compared twenty of the protocols after each had rated the changes on a seven-point scale. Agreement between reviewers was 80% and differences were discussed and resolved. One of these reviewers carried out the three-year analyses on all the sample subjects.

The Thematic Apperception Test

The Thematic Apperception Test was developed by Morgan and Murray [1] in 1935; it is based on the observation that an individual confronted with an ambiguous social situation and required to interpret it is likely to reveal his own personality in the process.

It has been shown to be a useful instrument in studying child development, social attitudes and sentiments, and culture and personality. Because of individual differences, however, and the fluctuating nature of personality dynamics, both rater and repeat reliability are quite variable and a stable pattern is difficult to establish. Nor have the numerous validity studies established firm and clear evidence of its ability to measure personality variables. Nonetheless, it is considered one of the more useful methods available for assessing personality dynamics.

Five cards were selected and repeatedly administered to the children in the sample. The cards were those especially useful in eliciting stories from children. The themes in each instance were evaluated in the manner described by Tomkins [2] and applied to the interpretation of the dynamics together with the other projective instruments.

The Bender-Gestalt Test

Developed by Lauretta Bender in 1938, the Visual Motor Gestalt Test is now in general use, and has been increasingly utilized by clinicians and researchers in explaining perceptual psychology. It is based on a theory originally expounded by the Berlin school of Koffka, Kohler, and Wertheimer. In this theory, the organism

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1 Morgan, C.D., and Murray, H.A. "Method for Investigating Phantasies: The Thematic Apperception Test"; Arch. Neurol. and Psychiatry, 34:289-306. 1935.

2 Tomkins, Silvan S. "The Thematic Apperception Test"; Grune and Stratton, Inc. 1947.

reacts to a stimulus by perceiving it as a whole and responding to it as a whole. In the act of perceiving, the individual contributes to the configuration; his response, then, is the combination of "the original visual pattern, the temporal factor of becoming, and the personal - sensory - motor factor." [1] Thus, a reorganizing takes place within the individual, based on his biologically determined sensory motor pattern of action. Diagnostic inferences can be made by examining the responses, or drawings, which reveal personality features characteristic of the individual. The figures are nine of Wertheimer's original patterns. This test can be used with children and yields data on maturation, perceptual ability, and personality variables.

The instrument was used in this study not only for diagnosis but for evaluating the child's growth as reflected in such factors as perceptual organization and sensory motor skills.

The Behavior Rating Scale

The Behavior Rating Scale is a teacher judgment rating scale developed from Bower's (1961) topic definition of behavior patterns of the emotionally handicapped. The characteristics under each topic definition on the graph Behaviorial Characteristics of Emotionally Handicapped Children were compiled by the research staff. In using the scale the teacher first tabulates the number of times a behavior occurs for each child, then makes a graph of that behavior at the end of each three-month period. Finally, at the end of the year, the teacher uses this information to rate each child on the five-point Behavior Rating Scale. The graph and scale are included in this section.

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1 Bender, Lauretta, M.A., M.D., "A Visual Motor Gestalt Test and Its Clinical Use." New York: American Orthopsychiatric Assoc. 1938.

SOCIAL AWARENESS SCALE

MARYLAND EDUCATIONAL RESEARCH PROJECT

DATE _____

STUDENT'S NAME _____

SOCIAL AWARENESS SCALE

SCHOOL _____

TEACHER'S NAME _____

SCORING

NEGATIVE — POSITIVE

0 10 20 30 40 50 60 70

SCORE

DEVELOPING BETTER INTERPERSONAL RELATIONSHIPS

1. Respects the rights and opinions of others. _____

2. Understands the need for rules and the necessity for observing them. _____

3. Takes part in making the rules needed by the group. _____

4. Accepts the role of leader or follower, as the situation requires. _____

5. Values minority points of view. _____

6. Distinguishes between work that can be done most effeciently by individuals and that which calls for group effort. _____

7. Tolerates opposing points of view. _____

8. Expresses ideas clearly and concisely. _____

9. Accepts the decision of the majority. _____

10. Works more cooperatively and productively. _____

SUB-TOTAL _____

DEVELOPING PERSONAL EFFE[illegible]IVENESS IN A SOCIAL SITUATION

SCORE

0 | 10 | 20 | 30 | 40 | 50 | 60 | 70

1. Uses appropriate problem-solving techniques in meeting personal problems. _____

2. Deals with problems rather than defends against them. _____

3. Accepts own limitations in working with others. _____

4. Realistically recognizes own abilities in group interaction. _____

5. Assumes responsibility for own ideas in group work. _____

6. Recognizes others' right to give an opinion without undue resistance. _____

7. Profits from criticism and suggestions of the group without attempting to change them. (tolerance) _____

8. Uses reality principle rather than wishful thinking in solving his problems. _____

9. Sees realistic self-role in relation to group role. _____

10. Handles self in face of failure or defeat. _____

SUB-TOTAL _____

APPLYING PROBLEM SOLVING AND REFLECTIVE THINKING SKILLS TO SOCIAL ISSUES

SCORE

0 | 10 | 20 | 30 | 40 | 50 | 60 | 70

1. Recognizes that a problem exists. _____

2. Defines the problem for study. _____

3. Plans how to study the problem. _____

4. Locates, gathers, and organizes information. _____

5. Interprets and evaluates information. _____

6. Summarizes and draws tentative conclusions. _____

7. Recognizes areas for further study. _____

8. Generalizes from specifics. _____

9. Utilizes the tool subjects to solve problems inherent in social issues. _____

10. Relates the past to the present in the study of change and continuity in human affairs. _____

SUB-TOTAL _____

GRAND-TOTAL -------- _____

BEHAVIOR RATING SCALE

MARYLAND EDUCATIONAL RESEARCH PROJECT

NAME _____

SCHOOL _____

TEACHER _____

BEHAVIORAL CHARACTERISTICS

OF

EMOTIONALLY HANDICAPPED CHILDREN

BEHAVIOR RATING SCALE

Name of Child _____

Rater _____

Date _____

(1) Inability to learn

Always | Often | Occasionally | Seldom | Never

(2) Inability to build interpersonal relationships

Always | Often | Occasionally | Seldom | Never

(3) Inappropriate or immature types of behavior or feelings

Always | Often | Occasionally | Seldom | Never

(4) A general, pervasive mood of unhappiness or depression

Always | Often | Occasionally | Seldom | Never

(5) A tendency to develop physical symptoms, such as speech problems, pains, or fears, associated with personal or school problems.

Always | Often | Occasionally | Seldom | Never

PROCEDURES FOR UTILIZING
SIMULATIONS IN SOCIAL STUDIES

IDEAS FOR
DEVELOPMENT OF SIMULATIONS
IN SOCIAL STUDIES

A SAMPLE SIMULATION
A History Unit

PROCEDURES FOR UTILIZING SIMULATIONS IN SOCIAL STUDIES

I. Setting Up the Simulation: A Real Life Situation and Problem for Study

   A. Creating and developing awareness of a real-life problem and presenting a life-like situation.

   B. Linking the specific problem to pupil's previous experiences, learning, or study.

   C. Creating a real-life situation.

   D. Encouraging the statement of facts and expression of opinions and feelings about the situation and related problems to stimulate interest.

II. Class Planning for the Simulation

   A. Defining the limits of the problem. Deciding on several specific problem aspects of the simulated situation.

   B. Determining the roles to be included.

   C. Selecting small work groups to focus on specific problems or roles.

   D. Reviewing procedures and standards for small group activities.

   E. Determining methods and techniques of evaluation.

III. Small Group Study and Preparation

   A. Surveying sources of available data, printed materials, models, people, etc.

   B. Utilizing resources to learn facts relevant to the problem.

   C. Organizing, sharing, and analyzing findings.

   D. Programming materials and data for playing key roles of the simulation.

   E. Providing for exchange of roles among small group participants.

IV. Role Playing

   A. Playing roles (small groups) as determined by group

after intensive study.

B. Evaluating performance in terms of advanced preparation evidenced and conclusions drawn by the study group.

C. Considering the possible need for further study.

D. Providing for playing different roles.

E. Discussing the values of changing roles (as values affect (1) individual, (2) group, (3) problem approach).

V. Evaluation

A. Summarizing major understandings derived from the problem simulation experience.

B. Summarizing related understandings derived from the problem simulation experiences.

C. Analyzing relationships between new learnings and previous experiences.

D. Discussing effectiveness of the simulation as an aid in

1. Applying insight gained in simulated situations to social environment, family life, and daily activities.

2. Applying self control learned in role playing to other aspects of daily life.

3. Utilizing the social studies curriculum content to learn about the expectations and obligations of role relations in which one engages.

4. Utilizing the skill subjects as tools for solving a variety of problems inherent in the simulations.

5. Working more cooperatively and productively in groups.

6. Adding to the repertoire of information, skills, and techniques in organizing one's efforts in problem solving.

7. Increasing one's ability to be self critical in evaluating his own contribution to the group effort.

SAMPLE UNITS FOR SIMULATIONS

The Family Unit

In this unit the children choose the traditional family roles of the mother, father, older child, younger child, grandmother, grandfather, etc. By playing roles in the family which they do not themselves occupy, they should gain objectivity or insight into the basic family relationships. The specific situations to be resolved will focus on a number of problems, one specific example of which is balancing a family budget. Groups will receive cards telling each participant his role and the amount of money available to the entire family; they will then decide what will be spent and for what items.

A satisfactory solution will be one which provides all of the basic necessities - food, shelter, and clothing - and which also takes care of other financial problems, such as money for education, entertainment, etc. The groups will be assigned different basic sums with which to work - anything from very minimal weekly, monthly, or yearly incomes to an almost limitless high amount. Through balancing a family's books or resolving any of its other problems, the children will learn the distinctions between different socialized family roles; they will learn the responsibilities associated with being male or female; head of the household or child in the house; etc.

This unit can be expanded to include problems facing family groups of other nations.

The Community Helpers Unit

The simulated environment in this unit is that of a city or town and its civil employees. The roles include those of all civil servants from garbage collector, to policeman, to teacher, to fireman, to city council member, to mayor, and to any additional roles which the children are capable of assuming. The children select the various roles in this simulated community and develop typical curriculum problems or "situations." These problems, situations, and roles are placed on charts. Each child receives a card which tells him the role he is playing, e.g. that of a policeman, teacher, mayor, etc. The problem to be solved might relate to deciding where to put a new school, deciding how to schedule trash removal, deciding how to control traffic around schools without interfering with business. The types of problems possible are almost limitless and can begin with ones fairly close to the pupils and related to the things they know; they can be expanded to include world situations with which children may not yet have come into contact but which are a part of the ordinary functioning of the community.

One specific way in which this simulation can be developed is

to assign different groups of children the same problem but different roles. Each group will then have to decide who is involved in the situation, who will have the responsibility for making the decisions, who will be responsible for carrying them out, and what effects these decisions will have on all of the community members represented. After this first round, the same cards may be redistributed so that the groups are facing the same problem but are in different roles concerning it. Such a simulated environment relates to the social studies curriculum in many ways: the children should gain notions of division of labor, division of responsibility, actual responsibility, and the effects or implications of decision making.

The next natural variation of the simulation is to present the groups with new problems either keeping or varying the roles played; after that, to present them with two or more world community problems which might be in conflict with each other yet which have to be resolved. Slower children can be assigned to the easier or less responsible roles, and as they learn to play roles and develop the notions inherent in the simulation they can go on to more complex or difficult roles.

The Natural Resource Unit (This unit can be played as a game)

In this unit the children essentially play barter roles; that is they are farmers, manufacturers, miners, etc. As the procedures are followed, each child is assigned a role, is told what natural resources he has, and what his goal is. For example, the child playing the role of a farmer may have fifty cows, thirty chickens, a pasture, and an oil well. He needs grain to feed his chickens and a barn to house his cows, although he does not necessarily need an oil well for farming or a pasture for chickens. He may then trade his oil well, perhaps, with a manufacturer who has grain, workers, and an oil refinery but no crude oil to process. He might also trade his chickens for a barn since the builder might have workmen, building materials, chicken coops and feed, but no chickens.

Each group may trade resource cards with other groups for a certain amount of time; and the group which winds up with either the most resources or the most productive combination of resources wins the game. This game teaches the elements of a free economy, of an economy which is based on the barter system. It shows the children the notion of interdependency necessary to an economic system and economic survival, as well as the advantages to be accrued in building up one's own position under a system of free enterprise.

The Natural Resources Unit can be expanded to include natural resources of other countries with a different economic system.

In all of these simulations, there are possibilities for the children to begin with a very simple or basic notion which they already possess or which they can easily learn; they can then elaborate

these notions and build more complex ideas and concepts as the situations or problems become more involved.

A History Unit

The succeeding unit follows the procedures utilizing the simulated environments technique.

A History Unit

I. Setting Up the Simulation: A Real Life Situation and Problem for Study

Motivation is important in every phase of education from the skill subjects to special subjects such as art, music, and physical education. Its value is just as important when using this procedure in social studies. However, the motivational activity need not be limited to one simulation but could apply to one entire section of the unit. One suggested motivational activity for the part of the unit that includes the sample simulation could be a well-planned bulletin board with a motivational question, Why Is There a Continuing Need to Explore?

The teacher will want to keep in mind the often stated ideas (1) going from the known to the unknown, (2) linking a specific problem to the pupils' previous experiences, and (3) keeping the community as a focal point for comparison with past and present events.

The current space exploration program could very well be used to create and develop an awareness of a real-life situation that will coincide with the problems to be studied, i.e., exploration during the fifteenth century.

The question, "How do you get approval and finances for something you wish to do?" may be used as a springboard to the discussion that will help create a real-life situation which should, in turn, link the previous experiences of the children to the current problem being studied. In answer to the above stated question, the students will bring out the types of activities for which they need money and how they secure the money - jobs for neighbors, a paper route, etc. They will also discuss how they must secure parental approval in order to participate in the activity.

The next step in the widening circle might deal with the space program. A display of newspapers and/or magazine clippings that explains and discusses the financial support for the space exploration would be pertinent. This step will lead the pupils into a discussion of when and why the nations are willing to finance exploration. The children should be encouraged to include their own reading and perhaps television viewing in this discussion.

The question, "What is needed on an exploratory expedition?" and the probable answers, "Money, approval, skill, and personnel" will lead into a comparison of present day space exploration with that of the fifteenth century. At this time the class organizational chart about the explorers previously studied could be reviewed. From this could come the logical question, "How would you have planned for a trip of exploration during the fifteenth century?" Now, the class is ready to do some background reading about Columbus. They begin with what was familiar to them and have progressed to the point where they are ready to link their experiences to the specific problems at hand.

Prior to the general reading about Columbus, a list of questions that the pupils would like to have answered can be recorded on the board

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and later on a chart. These questions and the background reading will be the basis for the formulation of a number of ideas for the simulation. Some sample questions are:

1. Where was Columbus born?
2. What experiences in his childhood stimulated him to become a sailor?
3. What education for sailing did he have?
4. How did Columbus, as a boy, spend his time?
5. What other explorers had he studied?
6. Why was Lisbon, Portugal, a good place to learn about the sea?
7. What impelling force motivates Columbus to explore and finally enlist the aid of Ferdinand and Isabella?
8. Why did Ferdinand and Isabella decide to finance his trip?
9. What rewards did he expect when he returned?
10. Why weren't the sailors eager to go with him?
11. How did Columbus reassure his crew?
12. Where did Spain send Columbus when he returned?
13. Why did Spain become dissatisfied with Columbus?

The pupils will be able to list many more questions about Columbus prior to their background reading because of privious stories, television programs, etc. The period reserved for the background reading should be followed with another period where the discussion of facts and opinions is encouraged. After the general background reading, several situations and their related problems could be "set up," thus setting the stage for the next big step so necessary in this particular procedure: Class Planning for the Simulation.

NOTE: The step just described could be done with the entire class or with small groups. As the teacher becomes more comfortable working with the small group situation, she may find it more profitable for the groups to formulate the questions and gain some of the necessary background information. (Four to ten pupils can comprise each small group.)

II. Class Planning for the Simulation

Planning by the class, with the teacher acting as a guide, is a most important part of this technique. The success of future lessons will hinge on how well this particular step has been executed by the teacher and the children by their participation in both the large and small groups.

The problem and its limits must be defined at this time. The problem is really an outgrowth of the situation and that (the situation) is usually developed from the general background information the students have gained prior to this period. The situation and the problem for this specific simulation was developed when the students realized, from the general reading, that Columbus had difficulty planning his voyage because of lack of money and that he had to justify his reasons for his proposed exploration in order to get the necessary funds from the Crown. The situation actually "sets the stage" for the problem. The students, with the teacher, should decide on the problem(s) (there may be more than one applicable to the same situation).

The roles to be included in the simulation can be determined after the problem has been clearly defined. The discussion and wording of the problem will lead into a discussion of the roles necessary to answer the problem. In this particular simulation the children suggested the roles of King Ferdinand, Queen Isabella, Columbus, and advisors to the king. The advisors can be further defined as Financial Advisor and Naval Advisor.

The aforementioned information concerning the simulation should be placed on a chart, such as:

> Situation: King Ferdinand, Queen Isabella, and their advisors are discussing with Columbus whether or not they should give him money and ships to make his voyage.
>
> Problem: In what ways did Columbus use his knowledge and experience to convince the rulers and their advisors that they should finance his voyage?
>
> Roles: King Ferdinand, Queen Isabella, Financial Advisor, Naval Advisor, and Columbus
>
> Conclusion: (This is filled in after the presentation of the simulation).

The next logical step is to form the small groups to focus on specific problems and roles. The children can have freedom of choice as to the simulation on which they would like to work. (There will usually be more than one simulation planned.) The teacher should direct the formation of the groups so that there will be a variety of levels* within each group.

The leader, or chairman, of the group should be chosen by the participants of each group. The duties of this person are to first, help the members with the role choices, keep the group moving toward the goal, which is the presentation of the simulation, and finally, at the close of the period evaluate the work done by the group. Each group leader reports his evaluation to the entire class by answering the following questions which have been listed on a chart: (other evaluation questions may be chosen).

Evaluation for Group Leaders

1. What, specifically, did your group accomplish today?

2. What attitude for learning did your group show today?

Prior to the first time the class is divided into groups, the teacher should work with the entire class to set up procedures, standards, and techniques of evaluation for small group activities. Following the discussion of the suggested procedures, standards, and evaluative techniques, they should be listed on the board, agreed upon by the class, and then transferred to charts so that they may be readily available. Several sample charts are:

HELPS FOR GROUP DISCUSSION

1. Give everyone an opportunity to make a contribution.

2. Speak in sentences.

3. Pronounce your words clearly.

4. If you disagree with another speaker, do it courteously.

5. Speak clearly so that all in your group can hear.

* levels of achievement

EVALUATING THE SMALL GROUP DISCUSSION

Individual:

1. What are the advantages of working in small groups?
2. How much did each one participate?
3. Which ideas given were very helpful?
4. Was the discussion tentative or final?

Group:

1. How evenly was the participation divided?
2. How well did the comments given help?
3. Is the decision the best we could make?
4. Did we accomplish our purpose?

SMALL GROUP EVALUATION

1. Did we resolve our problem?
2. Did most of us try to do our share of participating?
3. Did we remember to take turns?
4. Could we answer all of our questions?

III. Small Group Study and Preparation

An important part of the teacher preparation is to have as many resources as possible available for use by the small groups. Textbooks, encyclopedias, trade books, library books, pictures, films, film strips, and slides are a few. Teachers and pupils may find other resources. Often pupils will lend books and materials from their own library collection. Remember, the opening statement suggested that the teacher make these resources available; it did not infer that the teacher is responsible for locating the actual information for each group. It is very important that responsibility be relegated to each group. (These skills should be taught in language arts or English classes and practiced in the social studies.)

When the pupils in the small groups first survey the available materials, they should place a marker with some code number or name to identify the particular group, at the section where the specific information may be located. During the following period the pupils will be able to concentrate on reading, sharing, and organizing their findings.

One of the several groups may be allowed to work in the school library with the librarian. At times, if a room is available, it may be possible for one group to view a film strip that will contain information pertinent to the problem on which they are working. The use of informative pictures is invaluable to the pupils who are operating on a reading level below that expected for the grade. Note-taking should be kept to a minimum. The students should be encouraged to read to gain the information needed to answer the questions and resolve their problem. They should not be hampered by taking voluminous notes.

The group leader, following the research activities, should guide the discussion within the group. The following sample charts may aid the leader to conduct the discussion more effectively. (The standards included in the following samples should be "set up" with the class prior to small group assignments):

How to Establish the Purpose of the Discussion

1. Establish a feeling of compatability among the members making sure the purpose for the discussion is within the interest and maturity level of the group.

2. Prepare an outline of possible questions and points to be discussed.

3. Prepare the topic in terms of the immediate and ultimate goals (problem, situation, and roles to be played).

HOW TO KEEP THE DISCUSSION MOVING BY:

1. Starting the discussion with a pertinent question.

2. Keeping the discussion moving through questions and comments.

3. Guiding the discussion toward sharing among new members.

4. Encouraging the members to talk to each other rather than to a leader.

5. Keeping the discussion to the point being considered by summarizing at intervals.

6. Seeing that each member has an opportunity to express his ideas and that one or two members do not monopolize the time.

7. Developing a feeling of responsibility among the members for making worthwhile contributions.

8. Respecting the contributions of other members of the group.

9. Developing a feeling of responsibility of the members for the effective conduct of the group - observing rules of courtesy.

10. Developing the ability to accept group decisions.

CARRYING ON THE DISCUSSION

1. State the purpose. Restate as needed.

2. Move steadily toward the goal.

3. Link ideas to what has been said.

4. Summarize what has been decided.

5. Restate the decision to be sure you have carried out the purpose.

PREPARING FOR EFFECTIVE DISCUSSION

1. Understand the purpose clearly.
2. Prepare what you plan to say.
3. Be willing to consider new ideas.
4. Be able to stand alone for "the right."
5. Be willing to accept reasonable decisions made by the group.

This is the time when the knowledge gained from the research done by the members is shared, analyzed, and organized. The sharing is essential because, hopefully, each participant has used a variety of materials. The shared knowledge needs to be analyzed to determine if it is pertinent to the problem and if it can be used in relation to the roles to be played. Organization of the findings is necessary so that a definite conclusion can be reached by the observers when they evaluate the simulation that has been presented by the small group. However, there is no place nor time scheduled for an actual "rehearsal" of the simulation prior to the presentation. Children learn to communicate effectively and to speak extemporaneously with practice and by making mistakes.

The opportunity to be very selective with the materials to be used for playing the roles is important. The time periods spent in the small groups doing the necessary research "programming" the materials provide this opportunity.

During the small group preparation the pupils decide upon the roles to be played and print them on tagboard strips or cards. These will be used by each player during the presentation of the simulation.

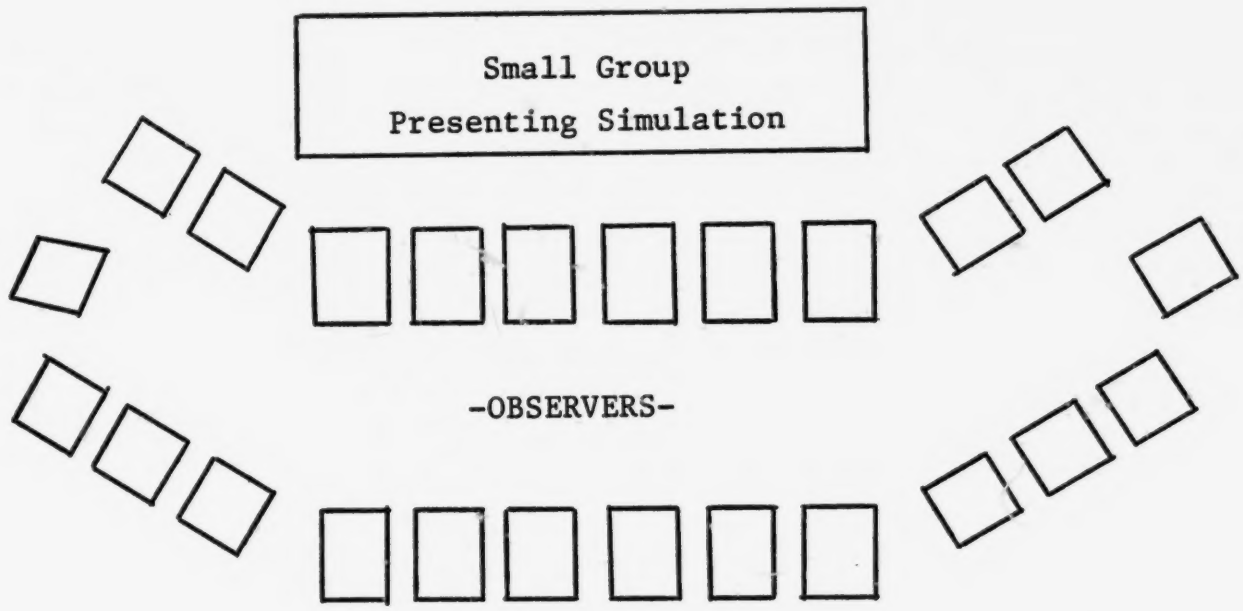
The above mentioned activities will lead quite naturally to the next step, i.e., Role Playing.

IV. Role Playing

Each small group is now ready to present the simulation to the class. Prior to each presentation the group needs to "set the stage" for the remainder of the class members who will assume the roles of observers. At this time the chart, upon which the situation, problem, and roles have been recorded, should be read to the class.

Following this introduction the group, with name cards (roles) in place, will present the simulation to the class. At first it may be necessary to place a time limit of five to ten minutes for each presentation. However, the teacher can judge if this need is evident. At first the groups may have a tendency to "drag" and to present more information than is pertinent to the designated problem. This fallacy will be overcome as the pupils get more experience with the technique.

The physical set-up of the room should lend itself to the success of the role playing. For example - the group participating in the actual role playing may be in the front or back of the room. It has been found to be beneficial if the observers place their chairs, as is indicated in the following diagram, near the small group rather than remaining at their desks.



One must <u>not</u> lose sight of the fact that the observers (<u>all</u> pupils in the class who are not actually participating in the presentation) make up an important group. It is necessary for the children to listen attentively because they will be called upon to state the "conclusion" to the problem as they understand it from the material presented by the small group. Teachers must set standards <u>with</u> the children (not <u>for</u> the children) so that they will be able to do this effectively. It is helpful to list these standards on a chart that can be used for future reference. The chart could include -----

HELPS TO GOOD LISTENING (OBSERVERS)

1. Listen for the main ideas.

2. Think of the details as facts that make the main ideas clearer.

3. Think of how you feel about the main ideas. Do you agree with the speaker?

4. Ask questions to clarify any uncertain information.

5. Think of the main points that are discussed to solve the problem.

6. Listen, so that you will be prepared to express your opinion about the conclusion.

7. Listen open-mindedly to any discussion of your contribution.

The conclusion reached from the presentation will indicate whether or not there is a need for further study by the group. More than one group may present the same simulation. When this is done it is the responsibility of the second group to include more and/or different information than was presented by the preceding group. The observers will formulate and the teacher will record the conclusion reached by each group. The observers will determine which conclusion better answers the problem and give the reasons for their choice. This process is a part of continuous evaluation as the procedures are followed. For example, the observers may evaluate the performance of the groups doing the role playing through questions similar to the following:

1. How well did the players carry out the responsibility of their roles?
2. How successful were they in achieving their roles?
3. What evidences of good preparation were they showing?
4. How suitable was their language in relation to the time and situation?
5. Did we resolve the problem?

At this time the entire class can vote to determine which group presented the best simulation on a particular topic or unit problem. The above five points can be used as evaluative criteria.

The members of the group who have completed the role playing activity may evaluate their simulation through questions similar to the following listed in chart form:

EVALUATION

1. Did we solve our problem?
2. Did most of us try to do our share of answering?
3. Did we remember to take turns?
4. Have we answered all our questions?
5. Did we speak clearly enough?

Step V in the procedure outline is a more general evaluation of total groups' participation in solving the problem(s) set up during the initial planning period.

EDUCATIONAL GAMES

INTRODUCTION

Educational games are one of the techniques we can use in helping children learn with enjoyment. They are valuable in developing favorable attitudes toward school work, in facilitating the learning process, and in aiding children to deal with their emotional and social problems in the classroom.

Some of the specific reasons or occasions for making use of games include the following:

For motivation when the work has less intrinsic appeal than usual.

For "hurdle help" when mastering a specific skill, an understanding, or an important fact.

For reinforcement of the learning of skills or material previously presented.

For helping children review and organize information they have previously studied.

For providing relief from anxiety about achievement by emphasizing the fun aspect.

For relaxation of tension because of feelings of resentment or inadequacy.

For channeling aggressive tendencies into constructive activities.

For helping the low status or low achievers gain recognition. The teacher can invent or adapt a game which will allow such children to excel in that which they can do best. She can also pair the low status child with a high status child, or pair a child who is poor in a specific skill with one who has much skill and let their combined efforts be the basis for determining the winner in a game.

For utilizing the values inherent in motor skills as an aid to learning -- especially manipulative activities.

For diversion tactics when a child, a group of children, or a teacher feels so angry or frustrated that it appears wise, for the good of the individual or the group, to postpone discussion, ventilation, or confrontation until some gratification (unrelated to the aggravating factor) has been enjoyed.

For allowing the children to identify with persons generally recognized as admirable and worthy of respect.

For permitting the children to enjoy the "driver's seat" occasionally, acting in the position of authority figure, i.e., tester, asker of questions, evaluator of product, keeper of records (scores in the games).

For helping children learn quickly and thoroughly the value and importance of cooperation in group efforts. (The group wins or loses - rather than the individual in most of the games.)

THE WIZARD

Source - Original. Similar to MEET THE EXPERT, the name of a television program.

Preparation - With the teacher guiding the class the children gradually become aware of the academic area or physical skill in which each child is outstanding. The class begins to recognize small groups of children as "our wizards" on things such as map reading, zoning regulations, long division, interpreting graphs, using references and/or source materials, catching or batting techniques in baseball, etc.

The newly recognized "wizards" try to retain their status by working to become more skillful or better informed.

Each child tries to become alert to possible questions or problems with which to "stump the wizards." Such questions or problems should be based on the current study and on material available to everyone in the class.

Playing the Game - When the children appear to have enough suitable questions or problems in a particular area ready, they write them on slips of paper. A committee checks them with the teacher for appropriateness. No questions involving minute details or obscure points are used.

Several children volunteer to challenge the "wizards." Slips of paper bearing questions or problems are drawn one at a time and read to a challenger who attempts to answer correctly. If he does so, he is awarded a score of 1-5 points. If he cannot answer correctly, the opposite player tries until the correct answer is given.

A child who can earn a high score is considered one of the "wizards" in that area or skill. One whose score is very low must show much improvement next time in order to retain his status as a "wizard."

Value - Each child in the class benefits by feeling that the group knows he is outstanding in some ability or knowledge that is desirable. He receives positive feedback when he works to retain his status. Little or no negative feedback is encouraged by the teacher. The child himself usually realizes that he must improve.

FUN WITH WORDS

Source - This game is similar to PASSWORD, the well known television program.

Preparation - During the work on any unit in social studies the children suggest words to be put on a vocabulary chart. This may be through informal oral suggestion during class discussion or by individual cumulative lists kept by each child during the unit for the game and made into one list by a committee assigned the responsibility.

A student or the teacher may make the chart and flash cards (preferably using attractive color), with each word shown on one of the flash cards.

Playing the Game - The vocabulary chart should be clearly visable to all to minimize frustration and limit the words used.

Children volunteer to play and invite a child to be their partners. Two pairs of partners play each time, hereafter referred to as 1A and 1B (partners) and 2A and 2B (partners).

1A and 2A sit facing class; 1B and 2B sit with backs to class facing their own partners.

The leader fastens one of the flash cards to the wall behind 1A and 2A. 1B and 2B alternate in giving a single word stimulus until 1A and 2A respond with the correct word.

When the correct word has been given, two new pairs of partners may play or one new pair may take the place of the losers and them compete against the winners of the first set.

Value - The children learn more easily and thoroughly the meaning of new terms important in the unit. They are highly motivated to list or suggest words to be included as the unit work progresses. They learn to associate many related ideas or concepts as they consider various possible stimulus words. They learn to evaluate the relative effectiveness of the various possible stimulus words in order to get the desired response. They learn to choose the words most significant to the particular unit being studied in order to keep the list on the chart to no more than 25 or 30 words.

Examples - The types of words suggested by children in a unit on how the thirteen colonies became a nation:

legislative	jurisdiction	flexible
assembly	levy	authorized
rebellion	excise	
representative	proportional	

Words from a unit on European background and exploration of the New World:

crusade	migrate	expedition
founded	explore	permanent
isolated	primitive	flourishing
circumnavigate	prosperous	demarcation

ANCESTORS

Source - Similar to a television game, CAN YOU TOP THIS?

Preparation - Children list names of outstanding people studied in a social studies unit. A card is made for each person on the list with the name of that person on the card,

A chart similar to the one shown below is posted:

1. Pretend that one of the famous people on the list is your father, grandfather or other relative.

2. Describe his exploits and the importance of the things he accomplished.

3. Use dramatic ways to convince your listeners of your ancestor's courage, persistence, resourcefulness, etc.

4. Stick to facts for which you can quote your source.

Playing the Game - Three or four children each draw one of the cards. Each child boasts of the exploits of the person whose name was on the card which he drew. The other children vote to indicate which child gave the fullest, most interesting and convincing account of the importance of his ancestor.

In another period 3 or 4 more children may participate, speaking of the same or different people.

Value - Children use constructively their desire to boast and feel important. By praising someone else they enjoy the reflection of glory and avoid the group disapproval usually incurred by those who boast about themselves. Children who have problems in identifying with their parents or who find little in their parents to be proud of may get some satisfaction out of this brief experience in the role of a relative of an important person.

Examples - From unit on exploration:

Vasco da Gama	Magellan
Prince Henry	Cabot
Columbus	Cabral

From a unit on how the thirteen colonies became a new nation:

John Adams	Benjamin Franklin
Patrick Henry	Thomas Jefferson
Alexander Hamilton	

WHO MIGHT HAVE SAID IT?

Source - Original.

Preparation - A cumulative chart of outstanding leaders is kept during the study of the unit.

As each leader is discussed in relation to the significant event in which he participated, the children discuss informally the feelings which he may have experienced.

Playing the Game - Following teacher demonstration and example, the children are encouraged to assume the role of one of the leaders listed and speak with appropriate feeling using words it would be reasonable to believe the leader might have said (in one sentence or several sentences).

The other children try to identify the leader whose role the child has assumed.

When the children have begun to show sufficient freedom and spontaneity, they may have a role assigned by drawing one of a group of cards, each bearing the name of one of the leaders.

Value - This game provides another opportunity for children to identify with famous people and to express strong feelings in a situation where such expression is not merely accepted but brings approval. This game can be used effectively to review the highlights of a unit. It stimulates verbalization of associated ideas. A lively, interesting discussion usually results as children begin to make comments such as, "Oh, I know when that happened. It was when he had just been ...." The enjoyment contributes to the learning.

Examples - From a unit on Eurpoean Background and Exploration of the New World:

"When I die, fasten weights on my body and drop it in the big muddy river."
(De Soto)

"Look! We are sailing north and the land is on the left."
(Diaz)

"When you turn back build a tower of stone on the shore to show how far south you have sailed."
(Prince Henry)

"Have you ever seen such plentiful and beautiful grapes?"
(Leif Ericson)

"Have you ever seen people with such big feet?"
(Magellan)*

"To think that my crew would leave us, my son, adrift in these icy waters in this strange land."
(Henry Hudson)

"We saw plenty of hunchbacked cows and poor Indian villages but no cities of gold."
(Coronado)

"Let us push onward and bathe in one more spring."
(Ponce de Leon)

"We have used up all of our money in the war with the Moslems. Come back in another year."
(King Ferdinand)

"If I take any more treasure aboard, the Golden Hind will sink."
(Sir Francis Drake)

* in reference to the Patagonians in Southern Argentina.

CARD SORTING

Source - Original (but inspired by Stephenson's* "Q Sort" technique for personality assessment).

Preparation - During the period of study on a social studies unit or at the conclusion, the children suggest dozens of phrases that seem significant to them. In a unit on geography (of Maryland) they might include pollution of oyster beds, tomato packing houses, bituminous deposits, the Biological Warfare Laboratory, fields of tobacco, Fort McHenry, St. John's College, granite quarries, Solomon's Island, or other similar items. A unit on history might have phrases referring to events, places, living conditions, etc. These items are listed on the chalkboard. Then 5 or 6 sets of 3 x 5 cards are made up with one item on each card. Each set contains all of the items.

Playing the Game - The children are divided into 5 or 6 groups. Each group is given a set of cards. Their task is to sort the cards into categories (Examples: Geographical regions, counties, or occupations might be the basis of the categories for "Geography of Maryland." The various New England colonies might be the basis for the categories in a history unit on "The Northern Colonies." Nations served might be used for "Explorers of the New World").

The children in each group sort the cards into piles (perhaps Eastern Shore, Southern Maryland, The Piedmont Plateau, The Appalachian Region).

In some classes the children may then arrange the cards in each pile in sequence (chronological order for a history unit); (for a geography unit, in the order in which one would see reminders in flying over the state by helicopter from northwest to southeast).

A variation is to arrange the cards in order from most significant or most typical to least significant or least typical for each region or colony.

The children then use the cards to work with the teacher in developing an organizational chart on the chalkboard.

Value - This game helps children organize details by classifying and by arranging in a logical sequence. Suggesting the items to use is an activity they enjoy, especially when they must reduce the total number by deciding to eliminate the least important ones. Manipulation of the cards

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* Cronbach, Lee J., Essentials of Psychological Testing, 1960, Harper and Brothers, New York, under the editorship of Gardner Murphy, pp. 514-516 and 593.

as the children sort and sort again seems to be particularly gratifying if the game is played following some difficult work requiring sustained concentration on abstract concepts.

Examples - mixed farming area
State House
Limestone quarrying
Presidential Retreat
Strip mining
Poultry farms
Ocean resorts
Fertilizer plants near piles of oyster shells
Wye Oak
First permanent settlement in Maryland
Biological Warfare Laboratory
Polluted oyster beds
Delmarva Peninsula
Naval Academy
Tobacco farms

THE MAP GAME - NUMBERS FOR LOCATION

Source - Original.

Preparation - In order to help children become familiar quickly with the map of a continent, country, or other area to be studied, the teacher prepares for each child a hektographed copy of a map of the area to be studied. The map will have no labels. Items of importance are numbered on the master. The teacher may use a code to designate various types of items.

Sample: Number only as 2 - country

Number in a circle (18) - body of water

Number in a square [22] - city

Number in a rectangle [30] - topographical region

Each child must be given a copy of the hektographed map with the numbers on it and a text or atlas which includes a map or maps showing each of the numbered areas.

Playing the Game - The children divide into groups of 3 - 5, each with a leader. They must use skill in locating the most useful map in the text or atlas for this particular task.

The group decides how to divide the work among the members. The group may decide to work as a whole, with one person recording the names of the places numbered. It may decide to divide the numbers such as 1 - 12, 13 - 24, 25 - 35 and assign the listing of the answers to the sub-group assigned each range of numbers.

The group which lists the most correct answers written legibly with correct spelling at the end of a predetermined interval, perhaps 15 minutes, wins the game.

The members of a winning group may often find themselves in demand as group leaders the next time the game is played with the same map, if reinforcement is needed, or with a different map.

Value - This is a pleasant, quick, and easy way to help children become familiar with a map, to use symbols in a code, and to spell correctly when copying answers from the map.

This game is such a favorite that we used it for purposes of review after being out of school for a long holiday. We used it in integrating new children into the group on September 6, 1966 by placing each new child with two "old pros."

See sample map attached. Key for Topographical Regions:

32 Brazilian Highlands
33 Pampas
34 Andes Mountains
35 Amazon Lowlands

SOUTH AMERICA (countries)

OE 6000 (REV. 9-66)

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION

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100 TITLE

Educational Programming in Simulated Environments for Seriously Emotionally Handicapped Junior High School Students

101 FINAL REPORT

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800 ABSTRACT

This junior high school study, a continuation of a three-year elementary school study, investigated the effectiveness of the various schedules of a simulated environments technique on emotionally handicapped adolescents. The fifty-eight subjects, whose original evaluations had shown no evidence of neurophysiological dysfunction or subnormal intelligence, were randomly assigned to four schedules in regular classrooms for experimental and conventional treatment. The simulated environments technique consisted of teaching strategies and procedures which revolved around role playing and was implemented in the unit framework of the social studies. Comparisons were made by analysis of variance and other statistical procedures. Significant differences were found in interpersonal relationships, personal effectiveness in a social situation, and problem solving favoring the long-term treatment. In terms of academic achievement this conclusion is suggested less strongly. Subjects who exhibit behavior patterns such as hyperactivity, perseveration, and a slower rate of learning need a longer period of placement in a special class or resource room. The study suggests that a differential program design may provide a better learning situation for those emotionally handicapped who exhibit characteristics of the minimally brain damaged, and that a continuum of services should be provided, i.e. special class, resource room, special placement in the regular class, etc. There is sufficient evidence in the objective data and in subjective observations to encourage further study and application of the experimental treatment with a larger number of subjects.

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